

To Apply for a P2 Loan:

- Select a pollution prevention project.
- Get a price quote from your vendor or sales person and estimate the project installation schedule.
- Obtain project application forms from the Environmental Science and Services Division (ESSD) or the P2 Loan web site. ESSD staff are available to assist with the application process.
- Estimate the waste reduction or energy and water conservation results from your project.
- Talk to your lender about the P2 Loan Program and your credit worthiness. Your lender can be an in- or out-of-state bank, thrift, or credit union.
- Fill out a loan application available through your lender. Fill out a project application available from the DEQ.
- Ask your lender to review your credit rating and establish the terms and conditions of the loan.
- Send your project application request to the DEQ for a project eligibility determination.
- Upon project approval, finalize your loan agreement with your lender and begin your P2 project.
- Submit a summary of your successful project to the Environmental Science and Services Division once it is completed.

The Small Business Pollution Prevention Loan Program provides loans for pollution prevention projects to small businesses with less than 500 employees. Loans may be up to \$400,000 at an interest rate of 5 percent or less.

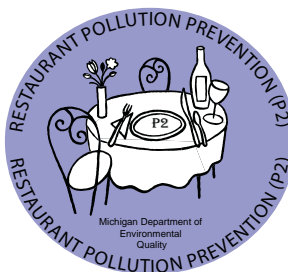
Small businesses, including restaurants, benefit by receiving reduced finance costs for projects that prevent pollution and ultimately save **MONEY**. The Michigan Department of Environmental Quality (DEQ) partners with the lending institution of the business's choice through a 50-50 loan participation arrangement. The Pollution Prevention Loan is then funded directly through the lender. Implementing pollution prevention projects can **SAVE** businesses from \$2,000 to \$50,000 per year with paybacks on investments generally ranging from one to three years.

If your business. . .

- employs 500 people or less, and
- is independently owned and operated

. . .you may be eligible for a

Small Business Pollution Prevention Loan



The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. Questions or concerns should be directed to the Office of Human Resources, P.O. Box 30473, Lansing, MI 48909.

Small Business Pollution Prevention Loans

and

Restaurant Environmental Stewardship

**With loans available
at 5% interest or less. . .**

**. . .now is the perfect time
to practice environmental
stewardship**



Jennifer M. Granholm, Governor
Steven E. Chester, Director
800-662-9278 • www.michigan.gov/deq

Potential Projects

Equipment/ Technology Modification

- Use energy-star rated appliances, ie:
 - Fryers, Griddles, Ranges, Ovens, Microwave ovens, Steam Cookers, Dishwashers, Ice makers, Refrigerators, Freezers
- Install adjustable exhaust hood controls to reduce energy use
- Install recycled water heat recovery, such as counter-flow heat exchangers. (Hot water flows out of dishwashers through pipes, and cold incoming water is sent through a copper pipe coiled around the outside of the outgoing hot water pipe. This transfers about 50 percent of the heat and reduces the amount of energy needed by water heaters).

Redesign

- Optimize day lighting by adding light tubes to increase light while preventing heat gain/loss.
- Install external solar shading on windows to reduce unwanted heat gain.
- Add bioswales/rain gardens on perimeter of parking lot or other impervious surfaces to purify and reduce runoff.
- Install xeriscaping which requires little or no irrigation.
- Choose material with recycled content if installing new flooring.
- Group hot appliances together away from cold appliances to reduce heat transfer
- Install a green roof system with drought-resistant plants such as Sedum. This will increase the insulation value of the roof while decreasing heat-island effect and retaining water onsite.
- White membrane roofs are also an option in reflecting sunlight to prevent excess heat gain
- Install green screens to reduce heat island effect
- Install a cistern to collect rainwater from roof for reuse- flushing toilets, onsite irrigation, etc.

Energy

- Lower energy costs by installing light timers or upgrade to more efficient lighting.
 - Compact Fluorescent Lighting (CFL)
 - Use Light Emitting Diode (LED) exit signs
 - Replace T-12 fluorescent tubes with high-efficiency T-8 tubes with electronic ballasts
 - Use low wattage metal halide or high-pressure sodium lamps for outdoor lighting
- Install tinted window film to reduce glare and lower heating and cooling loads
- Solar/wind/geothermal power generators
- Install 7-day 24-hour thermostats that reduce heating/cooling use when the building is unoccupied
- Install airside economizers on air conditioning systems
- Insulate hot water pipes and the hot water heaters
- Install a commercial grade tankless hot water system

Water Conservation

- Repair or replace leaky faucets
- Install low-flow faucets, low volume toilets, or waterless urinals
- Use collected stormwater for reuse in outdoor irrigation

Solid Waste

- Reduce excess packaging
- Reuse shipping boxes and pallets
- Participate in or initiate a food donation program
- Compost food waste onsite or donate to local farmers or haulers for composting
- Switch from purchasing disposable items to using reusable utensils, napkins, placemats etc. to reduce solid waste
- Recycling:
 - a. Mixed paper bin (paper, manila folder, envelopes, mail, pamphlets, magazines)
 - b. Co-mingle bin (glass, aluminum, plastic 1 & 2, milk and juice cartons)
 - c. Newspaper
 - d. Cardboard
- Instead of using Styrofoam products, switch to carry out boxes that are biodegradable, compostable, bioerodable,

hydro-biodegradable or photo-biodegradable. They are often made from variety of fibrous waste products from farming.

- Switch to refillable condiment containers made of recycled material instead of purchasing individual packets.
- Recycle fats, oils and grease to a renderer or for biofuel production
- Purchase products with recycled content for items such as menus, order pads, plastic bags, dish trays, rubber mats, carry out trays, etc.

Hazardous Waste

- Implement green purchasing policies
- Institute a hazardous waste collection program for non-biodegradable, ammonia based, petroleum based, chlorinated, dyed or fragranced cleaning agents.
- Switch to biodegradable, plant-based cleaning products
- Purchase cleaning supplies in concentrate, rather than in ready-to-use form
- Use pump sprays, roll-ons, liquid, or non-aerosol sprays instead of aerosols
- Substitute non-biodegradable, phosphate dish detergents with naturally derived liquid soaps
- Substitute ammonia glass cleaners and oven cleaners for natural cleaners
- Recover oils, solvents and other cleaning materials for recycle
- Practice Integrated Pest Management

RETAP Assessment

- Recommended p2 improvements from RETAP